BOOK REVIEWS

Patrick Gass, edited and annotated by Carol Lynn Macgregor. 1997. **The Journals of Patrick Gass: Member of the Lewis and Clark Expedition.** (ISBN 0-87842351-6). Mountain Press Publishing Company, Box 2399, Missoula, MT 59806, U.S.A. \$20.00. (**Orders:** www.mountain-press.com, info@mtnpress. com, 406-728-1900, 406-728-1635 fax). \$20.00, 445 pp., illustrated, 6" × 9".

Captain Lewis asked the men who could write to keep journals. Patrick Gass was one of the seven known journal keepers whose journals have survived. Patrick had only 19 days of formal education and by his own admission "never learned to read, write, and cipher till he had come of age." His journal provides us with more details about some activities of the Expedition than do the other journals and is more readable. Gass' journal is full of descriptions of the surrounding country and the wildlife, including a list of animals killed for food by the expedition. He was a keen observer, and since he was a carpenter, he provided details not included in other journals on the construction of earth lodges and canoes of the native people. Gass was almost certainly responsible for supervising the building of Forts Mandan and Clatsop; his records of those forts are particularly detailed and useful.

His journal was subsequently published in 1807 and proved quite popular: it went through six editions in six years. It was published just six months after the Corps returned to St. Louis and seven years before Lewis's and Clark's were published. The inclusion of Gass' previously unknown account book from later in his life lend new insight into Gass's work and his life. He lived until 1870 and died when he was ninety-nine. The previous year the Pacific railroad had been completed and Patrick Gass, one of the first Americans to cross the continent and the last survivor of the Corps of Discovery, had lived to see it.

The University of Nebraska Press edition of the Journals of Lewis and Clark, vol. 10, contains the journal of expedition member Sergeant Patrick Gass. The journal is to be found only in printed form; the original has been lost since its first publication. This edition is a valuable supplement to it and should be purchased by libraries holding the original.—Gary Jennings, Library, Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, TX 76102-4060, U.S.A.

Ronald D. Quinn and Sterling C. Keeley. 2006. **Introduction to California Chaparral.** (ISBN 0-520-24566-0, pbk.). The University of California Press, Berkeley, CA 94704, U.S.A. (**Orders:** California Princeton Fulfillment Services, 1445 Lower Ferry Road, Ewing, NJ 08618, U.S.A., www.ucpress.edu, 609-883-1759, 609-883-7413 fax). \$19.95, 322 pp., illustrated, 4½" × 7¼".

The California chaparral is well known to us. We have seen it hundreds, if not thousands, of times as a backdrop in movie and television productions from early westerns to MASH to the present day. But it is not just a feature of the Hollywood Hills. It is an essential part of the entire California landscape from the Mexican border to the Oregon border. The chaparral is a wonderfully resilient ecological community which has adapted to recurring fires and droughts. The book's authors, both chaparral researchers and scientists, were interested in writing a book for a wider audience. They were brought together by the Press and have produced a concise, engaging, and beautifully illustrated book. They describe an ecosystem which contains awesome and spectacular plants and animals: Fire Beetles that mate only on burning branches, lizards that shoot blood from their eyes when threatened, Kangaroo Rats that never drink water, and seeds that germinate only after a fire, even if that means waiting in the soil for a 100 years or more.

Part of the University of California Natural History Guide, the book follows the typical pattern for their guides. The contents include: **1.** The California chaparral. Discusses where it is found and what is the composition of vegetational communities. **2.** Mediterranean climate. How rainfall is affected by the unpredictable wind and the influence of temperature and microclimates. **3.** Fire. The cycle of fire and the influence of historical fire patterns. Natural responses to the effect of fire by plants and animals. **4.** Plants. Discusses the common evergreen shrubby vegetation as well as other plant families and introduced weeds. **5.** Animals. Enumerates the mammals, rodents, birds, and insects that inhabit the chaparral. 6.Living with the chaparral. Addresses prescribed fire, threats to the chaparral, and options for wise (human) growth. A glossary and supplemental readings and references complete the book.

Chaparral will introduce general readers to the plants and animals associated with chaparral and will be a review for biologists and land managers its natural history, ecology, and management challenges. It is useful both as a field guide and as an introductory overview of the ecology of chaparral. It also provides a better understanding of how we might live in harmony, safety, and appreciation of this unique ecological community.—Gary Jennings, Library, Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, TX 76102-4060, U.S.A.